SEATTLE CITY LIGHT

# CONSTRUCTION GUIDELINE

STANDARD NUMBER: **U7-10/NDK-70**
PAGE: 1 of 2
SUPERCEDING: October 11, 2004
EFFECTIVE DATE: December 1, 2004

## CONDUIT RISERS ON POLES

**1. General Requirements**

All conduits on poles shall be installed in a manner meeting the following requirements:

**1.1.** Minimum interference with pole and crossarm maintenance.

**1.2**. Maximum safety for lineworkers.

**1.3** .Minimum interference with other utilities on the same pole.

**2. Installation**

Conduits on poles shall be installed as follows:

**2.1**. A single conduit smaller than 2″ with conductors of less than 750 volts potential may be placed directly on the pole in the crotch of the crossarm (Fig. 2.1)

**2.2**. A single conduit 2″ and larger, or one with conductors of 750 volts or more, shall be spaced out from the pole face 4-1/2″ and offset to give 1″ clear space between the conduit and the center line of the pole lead. (Fig. 2.2)

**2.3**. When two conduits are installed they shall be spaced out 4-1/2″ from the face of the pole and separated 2″, providing a clear space 1″ on each side of the center line of the pole lead. (Fig. 2.3)

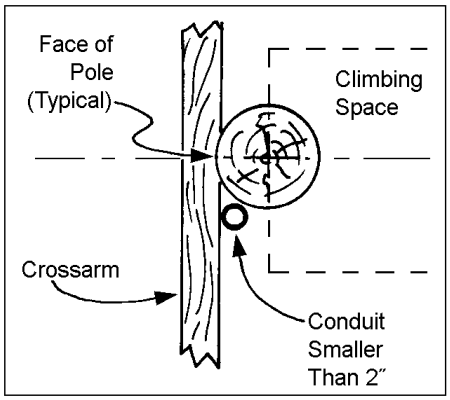


Figure 2.1

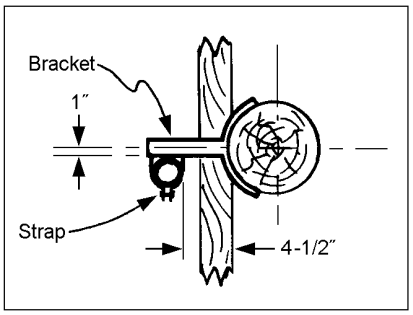


Figure 2.2

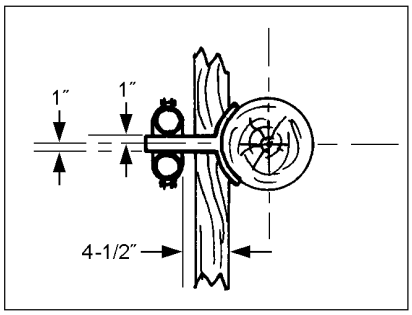


Figure 2.3

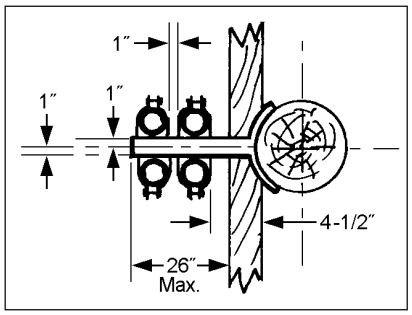


Figure 2.4

**2.4.** It is preferable to limit the number of conduits to two on a pole, but if more than two are required, they shall be installed as in Fig. 2.4. If two voltages are involved, the higher voltage shall be placed next to the pole.

**2.5**. The conduit shall have a minimum of one support in each length of conduit.

**2.6**. On poles with existing conduits, new conduits shall be installed in accordance with this specification. If it is practical, improve the existing conduit installations by moving the pole or conduits.

**2.7**. Where a telephone company terminal box interferes with conduit installation, Distribution Design will make arrangements for its relocation.

**2.8.** For grounding details, see SCL Construction Guideline U7-10.9/NDK-120.

**2.9.** Maximum bracket length shall be 26 inches. The number and size of conduits on a pole is strictly limited to that which can be properly mounted with a 26-inch bracket.

| STANDARDS COORDINATOR | STANDARDS SUPERVISOR | UNIT DIRECTOR |
|---|---|---|
| Charles L. Shaffer | John C. Skinner | Haydn Jay |

**3. Material Requirements**

The following material requirements apply to all conduit riser installations:

**3.1**. All conduit risers shall be Schedule 80 PVC or Rigid Steel conduit for the first 8-10 feet above the ground line, and shall be Schedule 40 PVC rigid plastic conduit above 8-10 feet. See Construction Guidelines U7-10.1/ NDK-80 and U7-10.2/NDK-90 for steel conduit installation.

**3.2.** Conduit spaced out from the pole shall be mounted using the following brackets and straps.

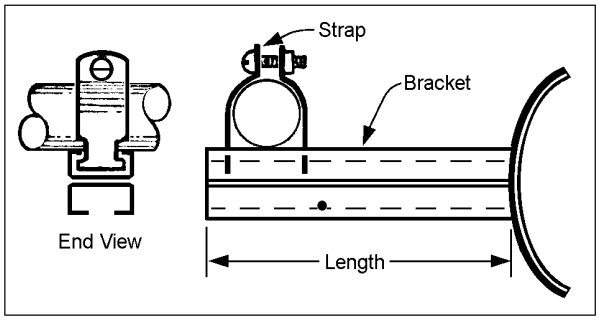


Figure 3.1

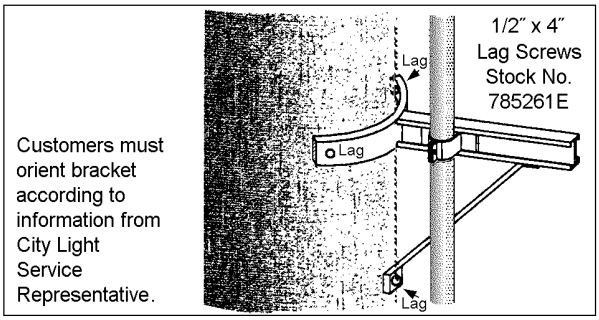


Figure 3.2

**Rigid Plastic Conduit PVC**

| Conduit Size, Inches | Schedule 40 Stock No. | Schedule 80 Stock No. | Adapter Coupling Plastic to Metal | Strap |
|---|---|---|---|---|
| 3/4 | 734526 | – | 734540 | – |
| 1 | 734527 | – | 734541 | 689760E |
| 1-1/4 | 734528 | – | 734542 | 689761E |
| 1-1/2 | 734529 | 738740 | 734543 | 689762E |
| 2 | 734530 | 738741 | 734544 | 689764E |
| 2-1/2 | 734531 | 738742 | 734545 | 689766E |
| 3 | 734532 | 738743 | 734537 | 689768E |
| 3-1/2 | 734533 | 738744 | 734538 | 689770E |
| 4 | 734523 | 738745 | 734539 | 689772E |
| 5 | 734524 | **DO NOT USE** | 734536 | 689774E |

**4. Installation of Conduit Support Bracket, with or without a Brace**

Install bracket brace for use at top of first 10 ft. length of rigid steel or schedule 80 PVC conduit.

**Conduit Support Bracket**

| | Stock No. | |
|---|---|---|
| **Length, Inches** | **Pole Riser, With Brace** | **Pole Riser, Without Brace** |
| 10-1/2 | 686792E | 686784E |
| 12-1/2 | 686794E | 686786E |
| 18 | 686796E | 686790E |
| 26 | 012330 | – |

**Reference:** SCL Material Standard 6867.5